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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/231,833	01/15/1999	CHIUNG SHIEN WU	JEL-30657	2569

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EXAMINER

SCHULTZ, WILLIAM C

ART UNIT PAPER NUMBER

2664

DATE MAILED: 03/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/231,833

Applicant(s)

WU, CHIUNG-SHIEN

Examiner

William C. Schultz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings in this application are objected to by the Draftsperson as informal. Any drawing corrections requested, but not made in the prior application should be repeated in this application if such changes are still desired. If the drawings were changed and approved during the prosecution of the prior application, a petition may be filed under 37 CFR 1.182 requesting the transfer of such drawings, provided the parent application has been abandoned. However, a copy of the drawings as originally filed must be included in the 37 CFR 1.60 application papers to indicate the original content.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5,7,9-16,18,19-25,27,29-30 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Quick, Jr. [U.S. Pat. 5,673,259].

Regarding claims 1,11,21, Quick, Jr. discloses all the following subject matters: A multi-channel communication system for data communication comprising: a first station; a plurality of second stations; and medium access control means for controlling operation of said data communication via one or more data links and control links between said first station and said second stations, said operation comprising: transmitting, from said second stations, one or more request packets to said first station

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via said one or more control links, said one or more request packets including a preamble code and a padding code, transmitting, from said first station, one or more code assignment commands to one or more of said second stations via said one or more control links, and transmitting, based on said one or more code assignment commands, one or more data packets from said one or more of said second stations to said first station via said one or more data links. **(figures 1,2,10,12A,13A)**

Regarding claims 2,12,22, Quick, Jr. further discloses said communication system is a wireless system; said first station is a base station and said second stations are mobile stations.**(figure 1)**

Regarding claims 3,13,23, Quick, Jr. further discloses said padding code comprises a dummy data code and an error detection code for collision detection by said first station.**(figure 8, part 804)**

Regarding claims 4,14,24, Quick, Jr. further discloses said padding code is selected based on a random selection of said preamble code.**(col. 17, lines 58-68; col. 18, lines 1-4)**

Regarding claims 5,15,25, Quick, Jr. further discloses a predetermined number of said preamble codes transmitted by said second stations is processed by said first station.**(col. 17, lines 16-18)**

Regarding claims 7,17,27 Quick, Jr. further discloses a first one of said second stations performs a random access attempt by transmitting a first one of said one or more request packets including a preamble code p_i ; and a padding code encoded by a scrambling code S_i ; and if said first station correctly receives said preamble code P_i and

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said padding code without error, said first station sends a code assignment command indicating that said random access attempt of said first one of said second stations is successful. **(figure 13A)**

Regarding claims 9,19,29, Quick, Jr. further discloses if said first station determines that there are greater than m of said request packets correctly received from said second stations, said first station transmits said code assignment commands to authorize only m of said second stations to transmit said data packets to said first station. **(col. 17, lines 1-8)**

Regarding claims 10,20,30, Quick, Jr. further discloses selection of said scrambling code s_i is determined by said preamble code p ; in accordance with a one-to-one mapping of function $g: P \rightarrow Y, g(p_i) = s_i, i = 0, \dots, 15$ where P represents the set of all preamble codes and Y represents the set of all scrambling codes. **(col. 13, lines 7-32)**

Claim Rejections - 35 USC § 103

Claims 6,8,16,18,26,28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quick, jr.[U.S. Pat. 5,673,259] as applied to claim 1 above, and further in view of TIA/EIA/IS-95-A.

Regarding claims 6,8,16,18,26,28, Quick, jr. discloses generating the data scrambling code but fails to disclose j , m , and r .

TIA/EIA/IS-95-A discloses the algorithm for generating a random scrambling code and defines the values of j , m , r . j represents a sequence number that indicates a particular time-offset in a number of timeoffsets in a predetermined frame

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period(7.1.3.2.1). m represents a number of said code assignment commands (**CAC is a preamble code 1-16, instant app spec pg.21. In TIA/EIA/IS-95-A 6.1.3.1.7.1-1 shows 16 power control groups, each corresponds to a channel, hence a CAC.**). r represents a sequence number that indicates in the CAC sequence the position of the CAC which contains the preamble code P (**6.1.3.1.7.2, last 14 bits is the PILOT_PN from figure 7.1.3.4.6-1 which contains the index into the sequence, the CAC**).

It would be obvious to one skilled in the art at the time of invention to modify Quick, Jr. via the IS-95-A spec so that compatability could be obtained with global standards.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fuhrmann et al. [U.S. Pat. 5,991,308] – Lower Overhead Method for Data Transmission Using ATM and SCDMA over Hybrid Fiber Coax Cable.

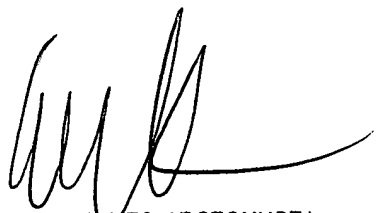
Bruckert et al. [U.S. Pat. 5,822,359] – Coherent Random Access Channel in a Spread-Spectrum Communication System and Method.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Schultz whose telephone number is 703-305-2367. The examiner can normally be reached on M-F(7-4)(first bi-week) M-Th(7-4)(second bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-9508 for regular communications and 703-305-9000 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.


WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

William Schultz
March 7, 2002

**Attachment for PTO-948 (Rev. 03/01, or earlier)
6/18/01**

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes **incorporated** therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.